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**UTILITY PATENT APPLICATION TRANSMITTAL**  
**(Large Entity)***(Only for new nonprovisional applications under 37 CFR 1.53(b))*Docket No.  
87552.081500/SE-1539IP.A

Total Pages in this Submission

**TO THE ASSISTANT COMMISSIONER FOR PATENTS**Box Patent Application  
Washington, D.C. 20231

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for an invention entitled:

**MULTI-PHASE CONVERTER WITH BALANCED CURRENTS**

and invented by:

**Michael M. Walters, Charles E. Hawkes, Robert H. Isham**If a **CONTINUATION APPLICATION**, check appropriate box and supply the requisite information:☒ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Which is a:

☒ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Which is a:

☒ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Enclosed are:

**Application Elements**

1. ☒ Filing fee as calculated and transmitted as described below
2. ☒ Specification having 16 pages and including the following:
  - a. ☒ Descriptive Title of the Invention
  - b. ☒ Cross References to Related Applications *(if applicable)*
  - c. ☐ Statement Regarding Federally-sponsored Research/Development *(if applicable)*
  - d. ☐ Reference to Microfiche Appendix *(if applicable)*
  - e. ☒ Background of the Invention
  - f. ☒ Brief Summary of the Invention
  - g. ☒ Brief Description of the Drawings *(if drawings filed)*
  - h. ☒ Detailed Description
  - i. ☒ Claim(s) as Classified Below
  - j. ☒ Abstract of the Disclosure

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### Application Elements (Continued)

3. ☒ Drawing(s) (when necessary as prescribed by 35 USC 113)
- a. ☐ Formal Number of Sheets \_\_\_\_\_
- b. ☒ Informal Number of Sheets 1
4. ☒ Oath or Declaration
- a. ☒ Newly executed (original or copy) ☐ Unexecuted
- b. ☐ Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional application only)
- c. ☒ With Power of Attorney ☐ Without Power of Attorney
- d. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s) named in the prior application,  
see 37 C.F.R. 1.63(d)(2) and 1.33(b).
5. ☐ Incorporation By Reference (usable if Box 4b is checked)  
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
6. ☐ Computer Program in Microfiche (Appendix)
7. ☐ Nucleotide and/or Amino Acid Sequence Submission (if applicable, all must be included)
- a. ☐ Paper Copy
- b. ☐ Computer Readable Copy (identical to computer copy)
- c. ☐ Statement Verifying Identical Paper and Computer Readable Copy

### Accompanying Application Parts

8. ☒ Assignment Papers (cover sheet & document(s))
9. ☐ 37 CFR 3.73(B) Statement (when there is an assignee)
10. ☐ English Translation Document (if applicable)
11. ☒ Information Disclosure Statement/PTO-1449 ☒ Copies of IDS Citations
12. ☐ Preliminary Amendment
13. ☒ Acknowledgment postcard
14. ☒ Certificate of Mailing
- ☐ First Class ☒ Express Mail (Specify Label No.): EL407177856US

# UTILITY PATENT APPLICATION TRANSMITTAL

## (Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.  
87552.081500/SE-1539IP.A

Total Pages in this Submission

### Accompanying Application Parts (Continued)

15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)

16. ☐ Additional Enclosures (please identify below):

### Fee Calculation and Transmittal

#### CLAIMS AS FILED

For	#Filed	#Allowed	#Extra	Rate	Fee
Total Claims	18	- 20 =	0	x \$18.00	\$0.00
Indep. Claims	3	- 3 =	0	x \$78.00	\$0.00
Multiple Dependent Claims (check if applicable) <input type="checkbox"/>					\$0.00
BASIC FEE					\$690.00
OTHER FEE (specify purpose)					\$0.00
TOTAL FILING FEE					\$690.00

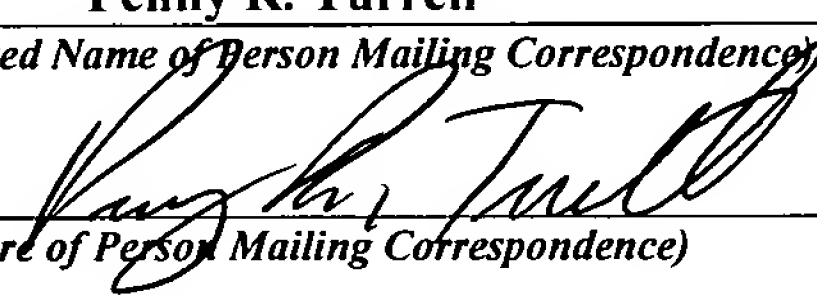
- ☒ A check in the amount of \$690.00 to cover the filing fee is enclosed.
- ☒ The Commissioner is hereby authorized to charge and credit Deposit Account No. 10-0223 as described below. A duplicate copy of this sheet is enclosed.
- ☐ Charge the amount of as filing fee.
- ☒ Credit any overpayment.
- ☒ Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.
- ☐ Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

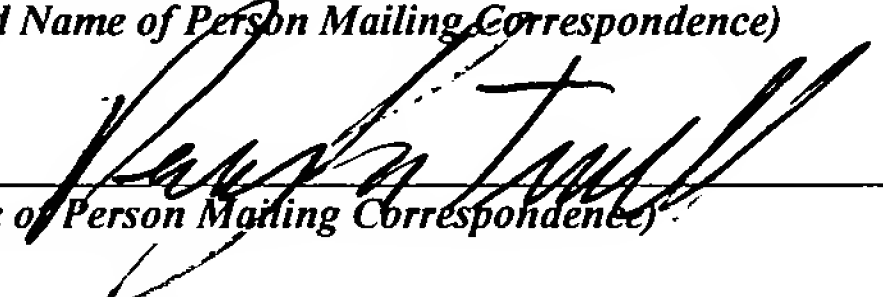
  
Signature

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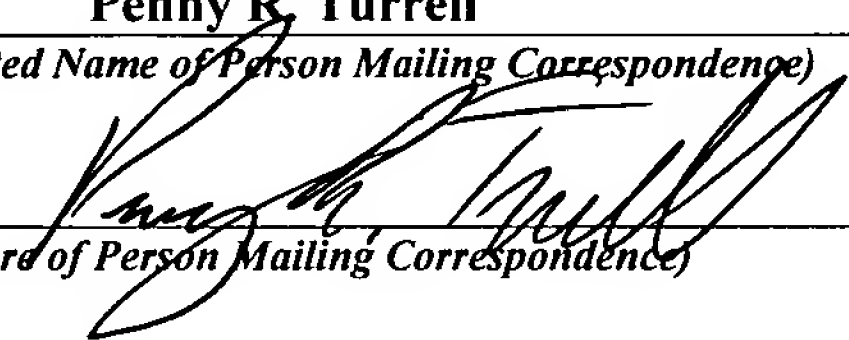
Dated: June 12, 2000

CC:

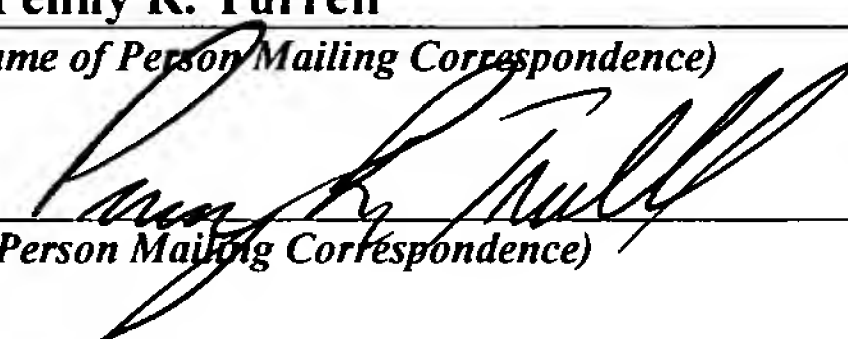
<b>CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.505)</b>			Docket No. 87552.081500/SE-1539IP.A
Applicant(s): Michael M. Walters, et al.			
Serial No. TBA	Filing Date Herewith	Examiner Unknown	Group Art Unit Unknown
Invention: MULTI-PHASE CONVERTER WITH BALANCED CURRENTS			
I hereby certify that the following correspondence:			
Utility Patent Application Transmittal Letter (3 pgs)			
(Identify type of correspondence)			
is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on			
June 12, 2000 (Date)			
Penny R. Turrell (Typed or Printed Name of Person Mailing Correspondence)			
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Applicant(s): Michael M. Walters, et al.				
Serial No. TBA	Filing Date Herewith	Examiner Unknown	Group Art Unit Unknown	
Invention: MULTI-PHASE CONVERTER WITH BALANCED CURRENTS				
<div>I hereby certify that the following correspondence:</div> <div>One (1) Sheet of Informal Drawings (Identified)</div> <div>(Identify type of correspondence)</div> <div>is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on June 12, 2000 (Date)</div> <div>Penny R. Turrell (Typed or Printed Name of Person Mailing Correspondence)  (Signature of Person Mailing Correspondence) EL407177856US (Express Mail Mailing Label Number)</div>				
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Applicant(s): Michael M. Walters, et al.				
Serial No. TBA	Filing Date Herewith	Examiner Unknown	Group Art Unit Unknown	
Invention: MULTI-PHASE CONVERTER WITH BALANCED CURRENTS				
<p>I hereby certify that the following correspondence:</p> <div style="border: 1px solid black; padding: 10px; min-height: 50px;"><p>Specification, Claims &amp; Abstract (16 pgs)</p></div> <p style="text-align: center;"><i>(Identify type of correspondence)</i></p> <p>is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on</p> <p style="text-align: center;"><u>June 12, 2000</u> <i>(Date)</i></p> <div style="text-align: right; margin-top: 20px;"><p><u>Penny R. Turrell</u> <i>(Typed or Printed Name of Person Mailing Correspondence)</i></p><p><u></u> <i>(Signature of Person Mailing Correspondence)</i></p><p><u>EL407177856US</u> <i>("Express Mail" Mailing Label Number)</i></p></div>				
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Applicant(s): Michael M. Walters, et al.			87552.081500/SE-1539 IP.A
<b>Serial No.</b> TBA	<b>Filing Date</b> Herewith	<b>Examiner</b> Unknown	<b>Group Art Unit</b> Unknown
Invention: MULTI-PHASE CONVERTER WITH BALANCED CURRENTS			
<p>I hereby certify that the following correspondence:</p> <div>Assignment w/Recordation Form Cover Sheet and \$40.00 Check (5 pgs)</div> <p>(Identify type of correspondence)</p> <p>is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on</p> <p><u>June 12, 2000</u></p> <p>(Date)</p> <div><p>Penny R. Turrell</p><p>(Typed or Printed Name of Person Mailing Correspondence)</p><p></p><p>(Signature of Person Mailing Correspondence)</p><p>EL407177856US</p><p>("Express Mail" Mailing Label Number)</p></div>			

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**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): Michael M. Walters, et al.

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87552.081500/SE-1539 IP.A

Serial No.

TBA

Filing Date

Herewith

Examiner

Unknown

Group Art Unit

Unknown

Invention: MULTI-PHASE CONVERTER WITH BALANCED CURRENTS

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09/591404

06/12/00

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Combined Declaration/Power of Attorney (Executed) (3 pgs)

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June 12, 2000

(Date)

Penny R. Turrell

(Typed or Printed Name of Person Mailing Correspondence)

  
(Signature of Person Mailing Correspondence)EL407177856US

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